Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_

**Questions to accompany photosynthesis and cellular respiration diagrams, captions, and sentence strips**

1. What does a producer need for performing photosynthesis, and what does photosynthesis produce?
2. What does an organism need to perform cellular respiration, and what does cellular respiration produce?
3. What roles do photosynthesis and cellular respiration have in an ecosystem?
4. If someone says, “Only organisms that breathe can perform cellular respiration,” are they correct? Explain.

1. If the mitochondria of half the organism in the ecosystem stopped functioning, what indicators in the ecosystem would change? Explain.
2. There are specialized producers that live in warm-water vents deep in the ocean. These producers do not perform photosynthesis, but instead perform a similar process with iron and other chemicals. Why do you think these producers use this process instead of photosynthesis?